## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 21 July 2005 (21.07.2005)

PCT

## (10) International Publication Number WO 2005/066281 A3

- C08L 101/00, (51) International Patent Classification<sup>7</sup>: C08K 5/14, 5/3435, C08L 23/06
- (21) International Application Number:

PCT/US2004/043354

(22) International Filing Date:

24 December 2004 (24.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/532,491

24 December 2003 (24.12.2003)

- (71) Applicant (for all designated States except US): DOW GLOBAL TECHNOLOGIES INC [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHAUDHARY, Bharat, I. [US/US]; 14 Michelle Court, Princeton, NJ 08540 (US). CHOPIN, Lamy, J. [US/US]; 16 Grandview Circle, Flemington, NJ 08822 (US). KLIER, John [US/US]; 5717 Stillwater Lane, Midland, MI 48642 (US). PETERSON, Thomas, H. [US/US]; 1311 Wychwood Road, Charleston, WV 25314 (US).
- (74) Agent: HANSBRO, Kevin, R.; The Dow Chemical Company, Intellectual Property, P.O. Box 1967, Midland, MI 48641-1967 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 9 September 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FREE-RADICAL INITIATION IN THE PRESENCE OF A STABLE ORGANIC FREE RADICAL AND RELATED COMPOSITIONS

(57) Abstract: The present invention is an improved polymeric composition comprising a free-radical reactive polymer, an organic peroxide, and a graftable stable organic free radical. The present invention permits suppression of an undesirable degradation or carbon-carbon crosslinking reaction while permitting the polymer to undergo the desirable grafting reaction.